ASARCO

Linda Jacobson (3 Copies)
RCRA Project Manager
US EPA Region VIII
8ENF-T
1595 Wynkoop Street
Denver, Colorado 80202-1129

June 5, 2008

SENT BY CERTIFIED MAIL
RETURN RECEIPT REQUESTED

CONSENT DECREE
CIVIL ACTION NO. CV 98-3-H-CCL
EAST HELENA SITE
WORK PERFORMED IN MAY 2008
PROGRESS REPORT #113

Dear Ms. Jacobson:

On May 5, 1998, Asarco and the United States Environmental Protection Agency (EPA) entered into a Consent Decree (Decree) to further the objectives of the Resource Conservation and Recovery Act (RCRA) and the Clean Water Act (CWA). Section XI of the Decree (Reporting: Corrective Action) requires Asarco to submit certified monthly progress reports to EPA which discuss the actions taken by Asarco in achieving compliance with the Decree. The reports are to be submitted to EPA no later than the twentieth (20^{th}) day of the following month. The following describes only those activities that have occurred or are related to projects performed during May 2008. The historical actions taken by Asarco in achieving compliance with the Decree are contained in previous monthly progress reports.

a. Describe the actions, progress, and status of projects which have been undertaken pursuant to Part VII of the Decree;

On February 26, 2008, Asarco submitted to EPA the 2008 Interim Measures Work Plan Addendum for the Asarco East Helena Facility. On April 24, 2008, Asarco responded to EPA's April 23, 2008 e-mail requesting further clarification on 1) initial and final depth soils samples previously collected from the thaw house demolition footprint, 2) cleaning and demolition procedures for the blast furnace and Monier flues, and 3) cleaning and characterization of the underground utilities that will be addressed under the Work Plan Addendum. On May 2, 2008, Asarco, EPA, and Montana Department of Environmental Quality technical representatives met to discuss the contents of the 2008 Interim Measures Work Plan Addendum and revisions to regulatory comments. On May 8, 2008, Asarco submitted to EPA the 2008 Interim Measures Work Plan Addendum (revision

May 2008). On May 21, 2008, Asarco submitted to EPA a revised Figure 2-1 to the Addendum that better illustrates the location of the material and staging and processing areas located within the demolition footprints. On May 22, 2009, Asarco submitted to EPA an Addendum to the CAMU Phase Design Analysis Report that further clarifies waste placement procedures. On May 22, 2008, EPA approved the Work Plan Addendum.

On April 23, 2008, EPA requested analysis of all the 6010 metals (with the exception of boron and tin) for the first and last sample depth interval for the five sample locations at the thaw house. The analytical summary report has been received from the laboratory and is attached to this monthly progress report. A summary of the data is contained in table 3-4. Table 3-4 also presents the calculated maximum potential leachate that could possibly be generated using SPLP or TCLP testing. The accompanying discussion and calculated results demonstrate that the potential for leachate of the metal parameters tested is low.

On May 21, 2008, Asarco, EPA, and Montana Department of Environmental Quality representatives met with the Mayor of East Helena to discuss the community's long-term growth policy. During the meeting, the Mayor expressed concerns that placement of a large-scale water treatment plant on Asarco-owned property within the growth policy area may complicate the City's developmental goals.

On May 27, 2008, Asarco, EPA, and Montana Department of Environmental Quality representatives met with the Montana Historic Preservation Officer to discuss the National Historic Preservation Act and Montana Antiquities Act, and its potential effect on the proposed 2008 cleaning and demolition project at the East Helena facility. The Montana Department of Environmental Quality will review the applicability of the Acts and impact on scheduled cleaning and demolition activities.

On May 30, 2008, Asarco notified EPA by electronic mail that it had selected Dr. Joyce Tsuji as its consultant for conducting the risk assessment work at the East Helena Plant. This notification was submitted pursuant to Section VII of the Consent Decree, (Corrective Action at East Helena - Proposed Contractor/Consultants). A copy of Dr. Tsuji's curricula vitae accompanied Asarco's May 30, 2008 submittal.

Corrective Action Management Unit (CAMU)

Construction of the CAMU Phase 2 cell commenced in March 2008. The placement of the compacted clay liner was 80% completed by the end of April. However, during the stockpile confirmation sampling and testing of the compacted clay liner material, two hydraulic conductivity tests performed on the stockpiled material were one-half an order of magnitude above the 1×10^{-6} cm/sec standard. Because these samples were above the 1.0 x 10-6 cm/sec requirements, EPA and Asarco agreed that undisturbed samples of the completed clay liner

would be collected and tested for hydraulic conductivity before beginning placement of any GCL or HDPE liners.

On May 1, 2008, Hydrometrics and Womack mobilized a geoprobe drill rig to the site and obtained two, 3-inch diameter by 36-inch long Shelby tube samples from the completed compacted clay liner for hydraulic conductivity testing. One of the samples was damaged when the laboratory received it and the results of the hydraulic conductivity tests performed on the damaged sample were questionable. Hydraulic conductivity tests on the other sample were within project specifications and well below the 1×10^{-6} cm/sec project standard. However, because of the problems reported by Hydrometrics and HWA Geosciences with one of the Shelby tube samples submitted for hydraulic conductivity testing, EPA and Asarco agreed to allow Hydrometrics to resample the compacted clay liner at the same location the previous samples were taken.

On May 7, 2008, Hydrometrics and Womack QA personnel again mobilized a truck mounted geoprobe drill rig to push the Shelby tubes. In an effort to minimize the disturbance to the soil samples during sampling, it was agreed that three smaller Shelby tubes would be pushed instead of one 36-inch Shelby tube. The samples were again sent to the respective laboratories for testing. The hydraulic conductivity test results for both of the second set of Shelby tubes were within the project specifications. EPA and Asarco agreed that placement of the GCL and HDPE liners could begin.

Once notification was given to proceed with liner placement, Northwest Linings and Geotextile Products made plans to mobilize to the site, and Helena Sand and Gravel began to finish grade the cell for liner placement. However, mid-May brought several significant precipitation events, which delayed Helena Sand and Gravel's finish grading of the cell. On May 20, 2008, Helena Sand and Gravel had completed finish grading of the south half of the cell and Northwest Linings and Geotextile Products mobilized to the site. However, high winds prevented them from beginning liner deployment. On May 21, 2008, more precipitation occurred at the area. With more precipitation forecasted for the next several days, Northwest Linings and Geotextile Products left the site with plans to remobilize after Memorial Day Weekend. Heavy precipitation arrived over the Memorial Day Weekend with over 3-inches of precipitation at the site. Helena Sand and Gravel stationed one-person onsite all weekend pumping accumulating water from the sump area of the cell into the stormwater pond.

The week of May 26, 2008 brought better weather and Northwest Lining and Geotextile Products remobilized to the site on May 28, 2008. With all of the precipitation received during the previous several days, it was difficult to get equipment into the cell to complete finish grading. On May 27, 2008, one piece of equipment became stuck in a soft area located in the northwest corner of the cell. This area of the cell had not been completed yet and had a loose 6-inch layer of material placed over existing compacted clay material for protection. This

loose material became saturated from all of the precipitation and caused the smooth drum roller to get stuck. Once the roller was removed from the mud, the area was allowed to air dry for another day, and was ripped up and recompacted. Placement of GCL and HDPE began on May 29, 2008 and by May 31, 2008 approximately 2/3 of the cell had been lined. During early placement of the GCL and HDPE, it was noted by QA inspectors that there were several wet spots in the subgrade. These areas were disked up, air-dried and recompacted to provide a suitable surface for placing liners. Liner placement is still proceeding, with an expected completion date of June 14, 2008.

Weekly construction progress meeting are being conducted each Wednesday morning. All participants are encouraged to attend or connect to the meeting through a telephone conference bridge. EPA is being provided summary minutes of each weekly meeting as well as daily and weekly CAMU construction reports, density test results, and hydraulic conductivity results from Asarco contractor.

On May 9, 15, and 20, 2008, Asarco provided further clarification on contractor qualifications, experience, training, medical monitoring, personal protection, and decontamination procedures. Asarco's May 15, 2008 response referenced the CAMU Design Analysis Report Addendum that further described waste placement procedures and equipment.

On May 7, 2008, Asarco provided EPA with the hydraulic conductivity test results from the first set of CCL samples. On May 15, 2008, Asarco forwarded Hydrometrics' memorandum that discussed the hydraulic conductivity test results from the second set of CCL samples. Based on the preliminary test results from the second set of CCL samples, EPA approved placement of the GCL and HDPE liners.

On May 16 and 20, 2008, Asarco communicated to EPA the proposed schedule for installation of the CAMU Phase 2 cell liner.

RI/FS Long-Term Monitoring Program

On May 4, 2008, the monitoring well drilling program outlined in the 2008 Addendum to the Interim Measures Work Plan, Groundwater Investigation Work Plan was completed. Hydrometrics conducted oversight of the drilling and well construction for all of the wells installed under the Work Plan. Groundwater monitoring wells EH-120, EH-122, and EH-67 were drilled and completed from May 1, 2008 to May 4, 2008. The locations wells EH-67 and EH-122 were moved from the original proposed location (per Asarco and EPA approval) since access to the property could not be obtained from the landowner. The new locations for the wells are to the north of Clarko storage units and east of groundwater monitoring wells EH-66 and EH-121. During May 2008, Hydrometrics completed the well development on the 13 new monitoring wells. Well development consisted of surging the wells with a 2-inch surge block,

bailing the sediment from the wells, and pumping the wells until the water was clear (or 5-7 well volumes were removed).

In late April 2008, the Semi-Annual Monitoring Program commenced with static water levels collected from the groundwater monitoring wells. A total of 135 groundwater (129) and surface water (6) sites were monitored as part of the monitoring program. Samples were not collected from ten of the monitoring wells (DH-9, DH-12, DH-16, DH-22, DH-32, DH-31, DH-37, DH-38, DH-48, and MW-7) since these groundwater monitoring wells were either dry or sufficient water was unavailable to collect a sample. A total of 169 samples were submitted for analyses of parameters outlined in Table A of the 2008 Monitoring Program. The total of 40 QA/QC samples (13 rinsate blanks, 13 DI blanks, 13 duplicates, and 1 QA/QC standard) were submitted for laboratory analysis.

On May 13, 2008, Asarco submitted to EPA a proposed modification to the arsenic speciation method in which unpreserved samples will be obtained from select groundwater monitoring wells. Once the data are analyzed, Asarco will be able to compare the standard preserved sample results with the new unpreserved sample results to determine whether preservation methods have a significant effect.

On May 13, 20, and 24, 2008, Asarco conducted the annual sampling of select residential groundwater wells, as prescribed in RI/FS Long-Term Monitoring Program (February 2008). The irrigation system at the Jones' home was recently tied into the City of East Helena water supply system. The Jones' irrigation groundwater well has been abandoned and will be removed from future sampling events. The analytical results from these three sampling event have not yet been received from Energy Laboratory.

A summary of the correspondence transmitted as part of the East Helena Consent Decree in May 2008 is included in Attachment 1.

b. Identify any requirements under the Part VII of the Decree that were not completed in a timely manner, and problems or anticipated problem areas affecting compliance with the Decree;

Uncharacteristic spring precipitation during the scheduled placement of the GCL and initial HDPE liner has delayed the construction of the CAMU Phase 2 cell. There were no other requirements that were not completed in a timely manner nor were there problems or anticipated problem areas that may affect compliance with the Decree.

c. **Describe projects completed during the prior month, as well as activities scheduled for the next month;**

In accordance with the 1) 2006 Interim Measures Work Plan Addendum, Final Cleaning, Soil Sampling, Backfilling, and Interim Cap Work Plan and 2) 2006 Interim Measures Work Plan Addendum, Former Acid Plant Sediment Drying Area Slurry Wall, Monitoring, Operation, and Maintenance Work Plan, four areas in which interim caps have been installed are being inspected on a monthly basis with the most recent inspections occurring on May 5, 2008.

CAMU Landfill - In accordance with the July 2000 CAMU Design Analysis Report (Operation and Maintenance Plan), the CAMU is being inspected monthly with the last inspection occurring on May 5, 2008. This monthly inspection documented the condition of the CAMU.

During June 2008, Hydrometrics is scheduled to develop and conduct slug testing of the new groundwater monitoring wells constructed under the 2008 Groundwater Investigation Work Plan. Construction of the CAMU Phase 2 cell will continue with weekly progress meeting scheduled to take place every Wednesday.

d. **Describe and estimate the percentage of studies completed;**

The Pump and Treat Pilot Scale Testing for Source Area Reduction of Groundwater Contamination is approximately 100% complete.

The jar testing (Phase I) of the East Helena PRB Materials Testing Program is 100% complete.

The slurry wall construction in the former acid plant sediment drying area is 100% complete.

The interim capping project for the former acid plant sediment drying area, dross area, sinter plant area, gas cleaning section of the acid plant, and thaw house is 100% complete.

The revised January 2008 CAMU Phase 2 Cell Design Analyses is 100% complete, the CAMU Phase 2 Cell financial assurance is fully funded, and construction of the CAMU Phase 2 cell is approximately 5% complete.

The slurry wall construction in the former speiss-dross plant area is 100% complete.

e. **Describe and summarize all findings to date;**

The details of past findings through April 2008 are described and summarized in previous monthly progress reports.

f. Describe actions being taken to address problems;

There were no other actions required to address problems associated with the Decree.

g. Identify changes in key personnel during the period;

Asarco continues to use the services of Asarco technical personnel and Hydrometrics Incorporated to perform the various activities required under the Consent Decree.

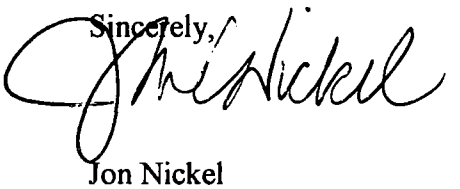
h. Include copies of the results of sampling and tests conducted and other data generated pursuant to work performed under Part VII of the Decree since the last Progress Report. Asarco may submit data that has been validated and confirmed by Asarco to supplement any prior submitted data. Updated validated and confirmed data shall be included with the RFI Report, if not delivered before;

The analytical summary report, summary table 3-4, and discussion of the calculated potential for leachate of the metal parameters tested for the first and last sample depth interval for the five sample locations at the thaw house are attached to this monthly progress report.

i. Describe the status of financial assurance mechanisms, including whether any changes have occurred, or are expected to occur which might affect them, and the status of efforts to bring such mechanisms back into compliance with the requirements of this Decree.

ASARCO filed a voluntary petition for relief under chapter 11 of Title 11 of the United States Bankruptcy Code in the Southern District of Texas on August 9, 2005. ASARCO hopes to use its chapter 11 bankruptcy proceeding to improve its financial position to the point where it can successfully reorganize and emerge from bankruptcy. ASARCO further hopes that at that time it will be in a position to make the required financial assurance demonstration. Asarco has established the necessary CAMU Phase 2 Cell financial assurance and has provided EPA with the complete executed original of the CAMU Trust Fund Agreement.

Sincerely,



Jon Nickel

CERTIFICATION
PURSUANT TO U.S. v ASARCO INCORPORATED
(CV-98-3-H-CCL, USDC, D. Montana)

I certify under penalty of law that this document, May 2008 Progress Report and all attachments, were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Signature _____
Name: Thomas L. Aldrich
Title: Vice President Environmental Affairs
Date: June 5, 2008

CONSENT DECREE
EAST HELENA SITE
MAY 2008 PROGRESS REPORT

SUMMARY OF CORRESPONDENCE
ATTACHMENT 1

DATE OF TRANSMITTAL	CORRESPONDENCE SENT FROM	CORRESPONDENCE SENT TO	SUBJECT	RESPONSE
May 7, 2008	Bob Miller	Linda Jacobson	Hydraulic Conductively Results	No Formal Response Required
May 8, 2008	Mark Rhodes	Linda Jacobson	2008 Interim Measures Work Plan (May 2008)	EPA Approval on May 22, 2008
May 9, 2008	Jon Nickel	Linda Jacobson	Response to CAMU Phase 2 Cell Construction Issues	No Formal Response Required
May 13, 2008	Bob Miller	Linda Jacobson	Modification to Arsenic Speciation Method	No Formal Response Required
May 15, 2008	Jon Nickel	Linda Jacobson	Hydraulic Conductivity Results (Confirmation Sampling)	No Formal Response Required
May 15, 2008	Jon Nickel	Linda Jacobson	Response to CAMU Phase 2 Cell Qualifications/Training	No Formal Response Required
May 16, 2008 (2 Submittals)	Jon Nickel	Linda Jacobson	CAMU Phase 2 Cell GCL/Liner Schedule	No Formal response Required
May 20, 2008	Jon Nickel	Linda Jacobson	CAMU Phase 2 Cell GCL/Liner Schedule	No Formal Response Required
May 20, 2008	Jon Nickel	Linda Jacobson	Response to Oversight for CAMU Phase 2 Cell GCL/Liner Installation	No Formal Response Required
May 20, 2008	Jon Nickel	Linda Jacobson	Response to CAMU Phase 2 Cell Qualifications/Training	No Formal Response Required

May 21, 2008	Jon Nickel	Linda Jacobson	2008 Interim Measures Work Plan, Response Letter and Figure 2-1	EPA Approval on May 22, 2008
May 22, 2008	Jon Nickel	Linda Jacobson	CAMU Phase 2 Cell Design Analysis Report Addendum, CAMU waste Placement	EPA Approval on May 22, 2008
May 30, 2008	Jon Nickel	Linda Jacobson	Notification of Dr. Tsuji for Risk Assessment Work	Response only if Objections
Throughout May 2008	Jon Nickel and Mark Rhodes	Linda Jacobson	CAMU Phase 2 Cell - Daily and Weekly Progress Reports	No Formal Response Required
Attached to This Monthly Progress Report	Jon Nickel	Linda Jacobson	Analytical Summary Report, Summary Table 3-4, and Calculated Maximum Potential Leachate Discussion	No Formal Response Required